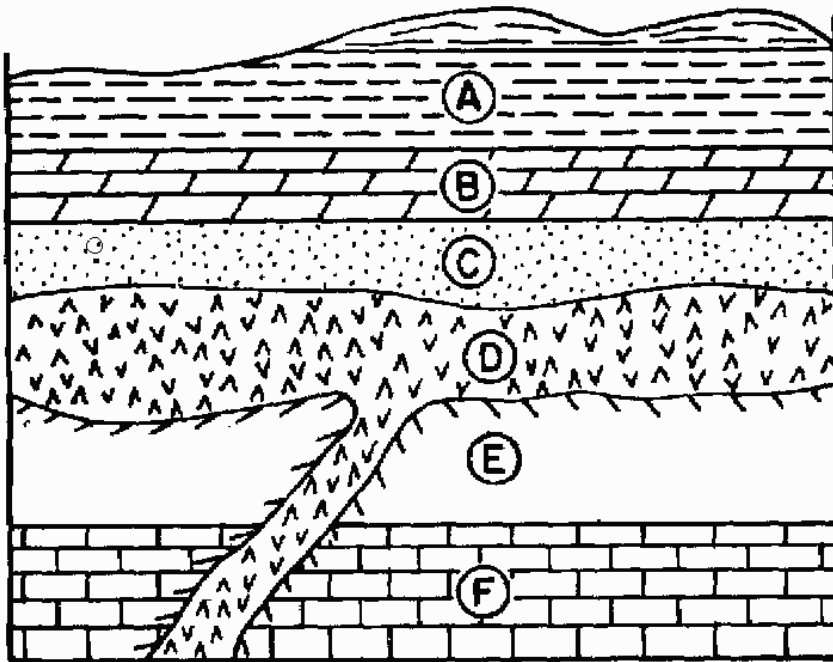


# Station 1:

1. The Law of Superposition indicates that:
  - A. Weathering and Erosion of rock layers occurs on the surface.
  - B. When sediments are laid down on Earth's surface, they form horizontal or nearly horizontal layers.
  - C. If a rock layer is cut by a fault or igneous intrusion, the rock that is cut must be older than the layer that cuts it.
  - D. The oldest rocks in an undisturbed sedimentary sequence will be at the bottom.
  
2. Which principal explains why Mucrospirifer cannot be found in Carboniferous-age rocks?
  - A. Principle of Inclusions
  - B. Principle of Unconformities
  - C. Principal of Faunal Succession
  - D. Principal of Original Lateral Continuity
  
3. What is a type of fossil that can be used for correlating and dating geologic strata found in different parts of the world called? \_\_\_\_\_
  
  
  
  
  
  
  
  
  
  
4. During this Epoch, the earth experienced very cold temperatures. Ice repeatedly pushed out of the Arctic Circle as continental glaciers which covered parts of Europe and North America. Mammals (such as the mammoth, rhinoceros, bison, reindeer and musk ox) evolved woolly coats to protect themselves from the cold temperatures. What is the name of this Epoch?  
  
\_\_\_\_\_

## Station 2

5. \* As a result of radioactive decay of an isotope, how much original parent isotope remains after four half-lives?
- A. 3.12%
  - B. 6.25%
  - C. 12.5%
  - D. 25.0%
6. A fossil tree contains 50% C14 and 50% N14. What is the absolute age of the fossil tree?
- A. There is insufficient information to calculate this.
  - B. 2,865y
  - C. 5,730y
  - D. 11,460y



7. \*Which of the following is the correct sequence of rock layers from the oldest to the youngest
- A. F - E - D - C - B - A
  - B. D - F - E - C - B - A
  - C. F - E - C - D - B - A
  - D. A - B - C - D - E - F
  - E. A - B - C - E - F - D
8. Radiometric dating is based upon
- A. the presence of fossils
  - B. cross cutting relationships
  - C. decay of radioactive elements
  - D. superposition

## Station 3

9. Identify Class of Specimen A: \_\_\_\_\_

10. Identify Genus of Specimen A: \_\_\_\_\_

11. During which period did the mass extinction of this class happened

- A. The Ordovician-Silurian extinction
- B. The Late Devonian extinction
- C. The Permian extinction
- D. Cretaceous-Tertiary extinction

12. \*Place the three genus below (specimen B,C,D) in order from oldest to youngest

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_



B



C



D

13. Out of the 3 specimens shown in question 12, which genus is blind? \_\_\_\_\_

## Station 4



14. Identify Genus: \_\_\_\_\_

15. Identify Class: \_\_\_\_\_

16. During what geologic time period did this genus lived? \_\_\_\_\_

- A. Devonian
- B. Cambrian
- C. Triassic
- D. Permian

17. True or False: Like frogs and salamanders, this genus also respired through their skin \_\_\_\_\_

## Station 5

18. Identify the Genus of Specimen A: \_\_\_\_\_
19. What is the common name of specimen A? \_\_\_\_\_
20. What parts of these organisms protect their delicate inside organs? \_\_\_\_\_
21. What is the common name of Specimen B?
- A. Oyster
  - B. Swamp clam
  - C. Devil's Toenail
  - D. Freshwater mussel
22. When did fossils that belong to the class of Specimen A and Specimen B, first appear?
- A. Devonian
  - B. Paleozoic
  - C. Cambrian
  - D. Triassic
  - E. None of the above

## Station 6

23. This fossil is most closely related to a:
- A. Squid
  - B. Jellyfish
  - C. Snake
  - D. Snail
24. This fossil is the state fossil of which state
- A. Ohio
  - B. Wisconsin
  - C. Delaware
  - D. Indiana
25. True or False: This fossil is an index fossil
26. Which of the following is an example of a trace fossil?
- A. petrified wood
  - B. silicified ammonite shell
  - C. preserved worm burrows
  - D. permineralized dinosaur tooth
27. The Cenozoic era is often called the Age of \_\_\_\_\_

## Station 7

28. Identify the genus of this specimen: \_\_\_\_\_

29. Common name: \_\_\_\_\_

30. The mode of feeding of this species is

- A. Filter feeder
- B. Deposit feeder
- C. Fluid feeder
- D. Molluscivore

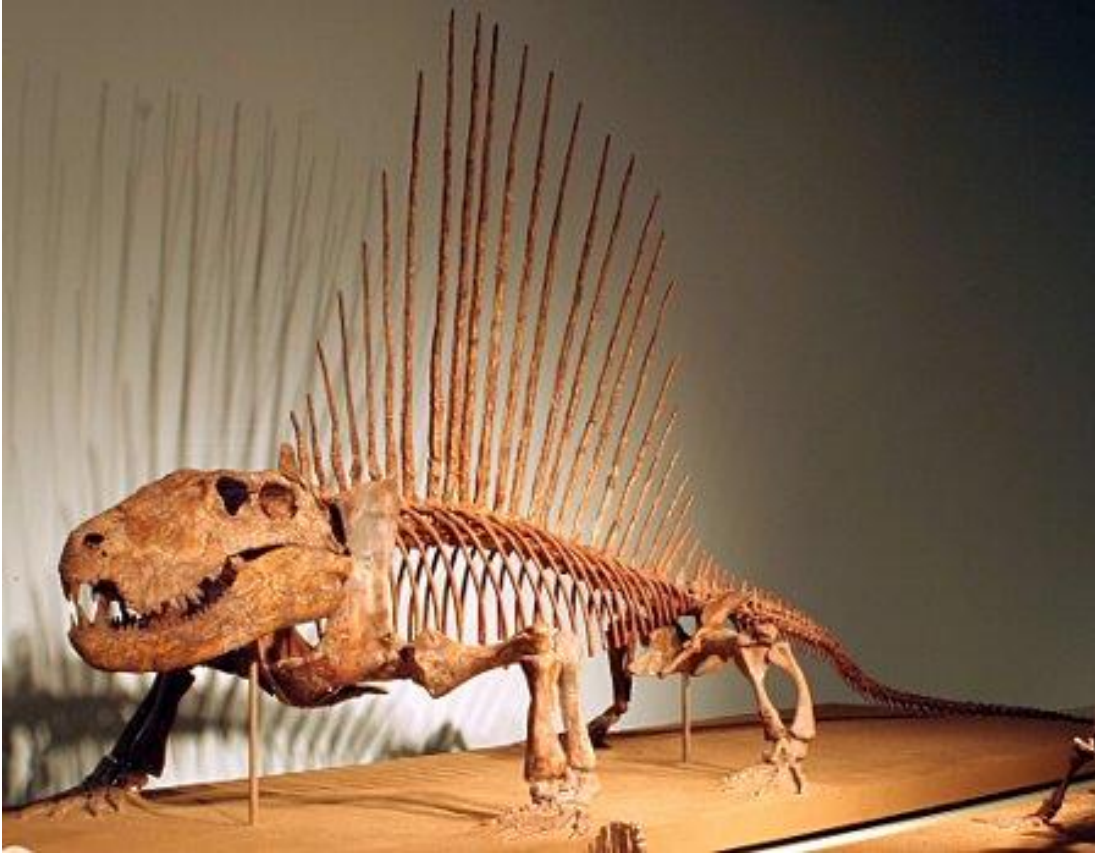
31. What mineral makes up the skeleton of this specimen?

- A. Biotite
- B. Calcite
- C. Sulfur
- D. Magnetite

32. These species were not able to build reefs because

- A. This species is not a coral
- B. Not able to attach themselves to the bottom
- C. Don't have the nutrients needed
- D. These species existed in deeper waters and corals are found only in shallow waters

## Station 8



33. Identify the Genus \_\_\_\_\_

34. Which habitat would this organism be found in?

- A. Marine
- B. Benthic
- C. Pelagic
- D. Terrestrial

35. During which period was this organism alive? \_\_\_\_\_

36. True or False: This is not a dinosaur \_\_\_\_\_

37. \*The large sail on the back is thought to have been used for, although no one is absolutely certain

- A. Protecting itself from other carnivores
- B. To regulate the temperature in its body
- C. For balancing
- D. All the above

## Station 9

Five fossils, preserved in a variety of ways have been shown in Specimens A-E. Match each with its method of preservation

38. Insect in amber (Specimen A)

A. pertification

39. Leaf (Specimen B)

B. unaltered remains

40. Tree branch (Specimen C)

C. steinkern or cast

41. Brachiopod (Specimen D)

D. carbonization or distillation

42. Bivalve (Specimen E)

E. pyritization

43. \*The actual removal of the original hard parts of an organism by the dissolving action of ground water, followed by deposition of mineral matter in their place is

A. Substitution

B. Distillation

C. Mummification

D. Replacement

## Station 10

44. What is the genus? \_\_\_\_\_

45. What kind of growth form is ?

- A. Branching
- B. Fenestrate
- C. Massive
- D. Encrusting

46. True or False? This is an index fossil \_\_\_\_\_

47. The mode of feeding of this species is. Filter feeder

- A. Deposit feeder
- B. Filter feeder
- C. Fluid feeder
- D. Molluscivore

48. This phylum is typically a colonial species. What is the individual within the colony called?

- A. Larvae
- B. polyp
- C. nematocysts
- D. Zooid

# Station 11

49. Identify which Genus does this specimen belong to?

50. What is the stratigraphic range of this specimen

- A. Permian
- B. Eocene
- C. Pleistocene-Present
- D. Jurassic-Cretaceous

51. What was the diet of this organism?

- A. Scavenger
- B. Herbivore
- C. Omnivore
- D. Carnivore

52. Which class do these organisms belong to: \_\_\_\_\_

## Station 12

53. What is the common name for this fossil? \_\_\_\_\_

54. Which Phylum does this belong to: \_\_\_\_\_

55. The rounded skeleton that encases this species is called \_\_\_\_\_

- A. Diatom
- B. Valves
- C. Septa
- D. Test

56. Where is the mouth of this species located?

- A. Has no mouth
- B. On the underside
- C. On the top
- D. On the side

57. Which of the following is not true about this species d

- A. This species have five sided radial symmetry
- B. Use their podia to pull themselves against the ocean floor.
- C. Some of these species have venomous spines
- D. This group of species are classified by their shape

## Station 13

58. What type of rock is Specimen A? \_\_\_\_\_
59. What does the color of the rock imply about the environment that Specimen A formed in?
- A. Oxygen-rich conditions prevented formation of iron-oxides in the sediment.
  - B. The environment was anaerobic.
  - C. Flooding had occurred, leaving black sand deposits where these plants grew.
  - D. The environment was high energetic
60. What type of rock is Specimen B? \_\_\_\_\_
61. A fossil is not likely to be found in
- A. Limestone
  - B. Sandstone
  - C. Shale
  - D. Basalt
62. What characteristic of a fossil would make it useful as an index fossil in determining the relative age of widely separated rock layers
- A. A wide range of time and a narrow geographic range
  - B. A wide range of time and a wide geographic range
  - C. A narrow range of time and a wide geographic range
  - D. A narrow time range and a narrow geographic range

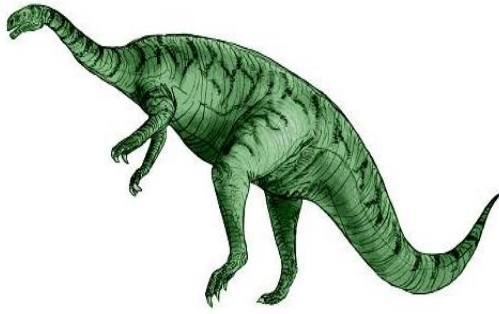
## Station 14

63. Identify the phylum of this specimen. \_\_\_\_\_
64. This phylum reached greatest diversity in which era?
- A. Paleozoic Era
  - B. Mesozoic Era
  - C. Neoproterozoic Era
  - D. Cenozoic Era
65. Which of the following organs are used by members of this phylum for absorption of oxygen?
- A. Pharynx
  - B. Coelom
  - C. Gills
  - D. Lophophore
66. What description best fits this fossil?
- A. solid shell like a snail
  - B. hinged shell
  - C. swims like a fish in water
  - D. crawls like a turtle on land

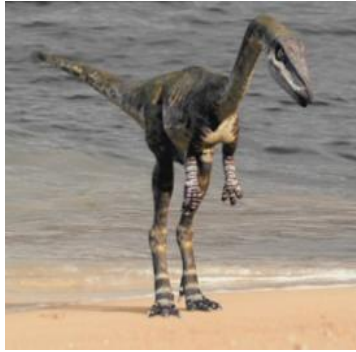
## Station 15

67. Identify this specimen. \_\_\_\_\_
68. This specimen first appeared in the fossil record during what eon? \_\_\_\_\_
69. Which organism(s) produced this specimen? \_\_\_\_\_
70. \* What is the environment in which this specimen thrived?
- A. Lacustrine
  - B. Epicontinental marine
  - C. Shallow marine
  - D. Deltaic
71. Ancestors of this specimen were responsible for what great event in Earth's history?
- A. Cambrian Explosion
  - B. Great Oxygenation Event (GOE)
  - C. Extinction of dinosaurs
  - D. Appearance of Neanderthals

## Station 16



Specimen A



Specimen B



Specimen C

### Identify the Genus:

72. Specimen A: \_\_\_\_\_

73. Specimen B: \_\_\_\_\_

74. Specimen C: \_\_\_\_\_

75. \* What is the prominent difference between Saurischia and Ornithischia? \_\_\_\_\_

76. The first bird ever known that lived during the Jurassic period?

## Station 17



*Specimen A*



*Specimen B*

77. Identify the genus for specimen A . \_\_\_\_\_
78. Identify the genus for specimen B \_\_\_\_\_
79. During which period did the first land plants probably appear?
- A. Silurian
  - B. Cambrian
  - C. Mississippian
  - D. Pliocene
80. What part of the plant does specimen A represent?
81. What is the common name for this group of plants?
82. What is the stratigraphic age range where specimen B is found?

## Station 18

83. This organism in specimen A is commonly referred to as \_\_\_\_\_
84. Is Specimen A Vertebrate or Invertebrate? \_\_\_\_
85. Specimen A can breathe through:
- A. Lungs
  - B. Gills
  - C. Skin
  - D. Intestines
  - E. All of the above
86. Specimen B came from what kind of organism? \_\_\_\_
87. What is the skeleton of Specimen B organisms made entirely of? \_\_\_\_
88. Which is the correct order for the changes in life that occurred during the Paleozoic era?
- A. amphibian, fish, invertebrate, reptile
  - B. fish, reptile, invertebrate, amphibian
  - C. invertebrate, fish, amphibian, reptile
  - D. reptile, invertebrate, amphibian, fish